

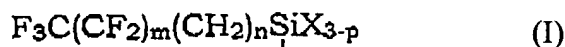
CLAIMS509A₂ >

1. A substrate comprising a relief which defines a low surface level and a high surface level, separated by a certain height not less than 1/10 of the characteristic dimensions of the motifs forming said high level, the latter representing 1 to 65% of the surface of the substrate.

2. A substrate according to claim 1, **characterized in that** it is hydrophobic/oleophobic by the fact that it comprises an agent chosen from among the group made up of:

a) the silicones, and

b) the compounds corresponding to the formulas:



and



- m = 0 to 15;

- n = 1 to 5;

- p = 0, 1 or 2;

- R is a linear or branched alkyl group or a hydrogen atom;

- X is a hydrolyzable group such as a halogeno, alkoxy, acetoxy, acyloxy, amino, NCO group;

- p' = 0, 1, 2 or 3.

3. A substrate according to claim 1, **characterized in that** it is hydrophilic/oleophilic.

4. A substrate according to claims 1 to 3, **characterized in that** said height ranges between 0.01 and 10 micrometers.

5. A substrate according to one of claims 1 to 4, **characterized in that** the geometry of said relief does not display any periodicity.

6. A substrate according to one of claims 1 to 4, **characterized in that** the geometry of said relief displays a periodicity.

7. A substrate according to one of claims 1 to 6, **characterized in that** said low and high surface levels are connected to one another by means of partitions approximately perpendicular to the plane of the substrate.

8. A substrate according to one of claims 1 to 7, **characterized in that** said high surface level displays a continuity in at least one direction of the plane of the substrate.

9. A substrate according to claim 8, **characterized in that** said relief comprises a multiplicity of approximately identical parallelepipedal objects, parallel and uniformly spaced.

10. A substrate according to one of claims 1 to 7, **characterized in that** said high surface level does not display continuity in any of the directions of the plane of the substrate.

11. A substrate according to one of the preceding claims, **characterized in that** said relief comprises a multiplicity of approximately identical cylindrical craters uniformly distributed on the substrate, their axes being approximately perpendicular to the plane of the substrate.

12. A substrate according to one of the preceding claims, **characterized in that** said relief comprises a discrete series of identical or different objects.

13. A substrate according to claim 12, **characterized in that** said objects consist of cylinders with axes approximately perpendicular to the plane of the substrate.

14. A substrate according to claim 13, **characterized in that** said relief comprises a multiplicity of approximately identical cylinders of revolution uniformly distributed on the substrate.

15. A substrate according to one of the preceding claims, **characterized in that** said relief is based on at least one compound of at least one of the elements: Si, W, Sb, Ti, Zr, Ta, V, Pb, Mg, Al, Mn, Co, Ni, Sn, Zn, In, and/or a plastic, possibly containing a filler, which may be hardened by means of application of an energy source, or a thermoplastic, and in that at least one underlying portion of the substrate is composed of a glass and/or a plastic.

16. A substrate according to one of the preceding claims, **characterized in that** it is a conductor of electricity.

17. A substrate according to one of the preceding claims, **characterized in that** it displays anti-reflecting properties.

18. A substrate according to one of the preceding claims, **characterized in that** it displays anti-staining properties.

19. A process for formation of a substrate comprising a relief according to one of the preceding claims, **characterized in that** it is composed of the stages consisting in:

- applying to a support surface a precursor of liquid to viscous consistency, in
- carrying out the molding of a sol-gel from this precursor, then in
- consolidating this through evaporation of solvent, possibly with the aid of an energy source.

20. A process for formation of a substrate comprising a relief according to one of claims 1 to 18, **characterized in that** it is composed of the stages consisting in:

- applying to a support surface a polymerizable and/or cross-linkable plastic possibly containing fillers, in particular mineral fillers for reinforcement, in
- performing polymerization and/or cross-linking as well as separation of possible residual components such as solvent, possibly with the aid of an energy source.

21. A process for formation of a substrate comprising a relief according to one of claims 1 to 18, **characterized in that** it is composed of the stages consisting in:

- forming a mask on a surface according to a technique such as serigraphy, ink-jet printing, lithography, in particular photolithography, engraving, for example ionic reactive, or similar,
- attacking, in particular by chemical means, the portions of said surface not protected by this mask, then possibly in
- removing the mask.

22. A process for formation of a substrate comprising a relief according to one of claims 1 to 18, **characterized in that** it includes a stage consisting in causing a film in itself forming said relief to adhere to a support surface.

WO 00/64829

16

PCT/FR00/01051

23. A process according to one of claims 19 to 22, **characterized in that** the claimed stages result in the formation of a mold which may be used to form said substrate.

24. A process according to one of claims 19 to 22, **characterized in that** the claimed stages result in the formation of said substrate itself.

25. A process according to one of claims 19 to 24, **characterized in that a** hydrophobic/oleophobic or hydrophilic/oleophilic agent is incorporated into said substrate comprising a relief.

26. A process according to one of claims 19 to 24, **characterized in that** it comprises a stage consisting in forming a hydrophobic/oleophobic or hydrophilic/oleophilic coating on said relief.

27. A glazing made up, at least in part, of a substrate according to one of claims 1 to 18.

28. An application of a glazing according to claim 27 for the building trade or street furnishings.

29. An application of a glazing according to claim 27 for an air, marine or land transportation vehicle.

30. An application of a glazing according to claim 27 for a screen, a lamp or an electronic display.

31. An application of a glazing according to claim 27 for furnishings or household electrical appliances, for example as a refrigerator or other shelf, shower partition, refrigerator or oven door, display case, vitreous ceramic plate.

Am A₂
Am A₃ >